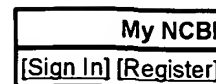
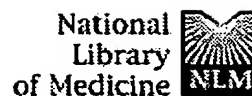
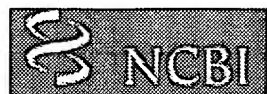


Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"5496872".did.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 15:28
S1	1757	530/324.ccls. and coupling	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:39
S2	1334	530/324.ccls. and coupling SAME peptide	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:40
S3	0	530/324.ccls. and coupling SAME peptide and "NH-CO-A-CO-S"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:40
S4	0	"NH-CO-A-CO-S"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:40
S5	0	"NH-CO-A-CO"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:40
S6	3	530/324.ccls. and coupling SAME peptide and alkylene and arylene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:41
S7	247	coupling SAME peptide and alkylene and arylene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:41
S8	202	coupling SAME peptide and alkylene SAME arylene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 12:41

S9	3	coupling SAME peptide SAME alkylene SAME arylene	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/05/13 15:25
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Time Result

#4 Search bradykinin and dimers

15:07:21 15

#3 Search stewart and bradykinin and dimers

15:07:10 4

#2 Search stewart and bradykinin and 1999

14:53:11 4

#1 Search stewart and bradykinin

14:53:05 173

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May 2 2005 17:45:08

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=> d his full

(FILE 'HOME' ENTERED AT 13:11:45 ON 13 MAY 2005)

FILE 'HCAPLUS' ENTERED AT 13:11:51 ON 13 MAY 2005

L1 1 SEA ABB=ON PLU=ON (GB2000-12083# OR GB1999-20397# OR
WO2000-GB3306#)/AP,PRN

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FILE 'HCAPLUS' ENTERED AT 13:14:01 ON 13 MAY 2005

L2 TRA L1 1- RN : 47 TERMS

FILE 'REGISTRY' ENTERED AT 13:14:01 ON 13 MAY 2005

L3 47 SEA ABB=ON PLU=ON L2
L4 26 SEA ABB=ON PLU=ON L3 AND S/ELS
L5 19 SEA ABB=ON PLU=ON L4 AND S=1
L6 1 SEA ABB=ON PLU=ON L5 AND C59H83N12O37P5S
L7 STR
L8 0 SEA CSS SAM L7
L9 SCR 2039 OR 2041 OR 2050 OR 2049 OR 2048 OR 2053 OR 2052 OR 204
L10 SCR 2007 AND 2021 AND 1993
L11 0 SEA CSS SAM L7 AND L10 NOT L9
L12 0 SEA CSS FUL L7 AND L10 NOT L9
L13 0 SEA SSS SAM L7 AND L10 NOT L9
L14 14 SEA SSS FUL L7 AND L10 NOT L9

FILE 'HCAPLUS' ENTERED AT 13:47:35 ON 13 MAY 2005

FILE 'REGISTRY' ENTERED AT 13:47:39 ON 13 MAY 2005
SAV TEM AUD222F2/A L14

FILE 'HCAPLUS' ENTERED AT 13:47:54 ON 13 MAY 2005

L15 5 SEA ABB=ON PLU=ON L14

FILE 'HCAOLD' ENTERED AT 13:48:05 ON 13 MAY 2005

L16 2 SEA ABB=ON PLU=ON L14
SEL AN
EDIT E1-E2 /AN /OREF

FILE 'HCAPLUS' ENTERED AT 13:48:29 ON 13 MAY 2005

L17 2 SEA ABB=ON PLU=ON ("CA53:12186A"/OREF OR "CA56:11449G"/OREF)

L18 7 SEA ABB=ON PLU=ON L15 OR L17

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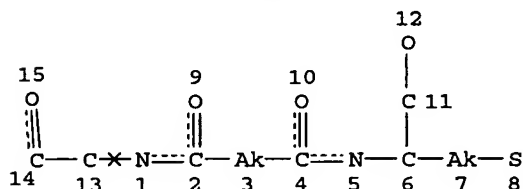
* The CA roles and document type information have been removed from *
 * the IDE default display format and the ED field has been added, *
 * effective March 20, 2005. A new display format, IDERL, is now *
 * available and contains the CA role and document type information. *
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=> d que sta l14

L7 STR



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CONNECT IS M1 RC AT 1
 CONNECT IS M2 RC AT 12
 CONNECT IS M1 RC AT 13
 CONNECT IS M1 RC AT 14
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L9 SCR 2039 OR 2041 OR 2050 OR 2049 OR 2048 OR 2053 OR 2052 O
 R 2043 OR 2054
 L10 SCR 2007 AND 2021 AND 1993
 L14 14 SEA FILE=REGISTRY SSS FUL L7 AND L10 NOT L9

100.0% PROCESSED 350225 ITERATIONS
 SEARCH TIME: 00.00.18

14 ANSWERS

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=> d all hitstr l18 tot

L18 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:66410 HCAPLUS
 DN 138:394839
 ED Entered STN: 28 Jan 2003
 TI Zinc complexation of glutathione and glutathione-derived peptides
 AU Gelinsky, M.; Vogler, R.; Vahrenkamp, H.
 CS Institut für Anorganische und Analytische Chemie der Universität Freiburg,
 Freiburg, D-79104, Germany
 SO Inorganica Chimica Acta (2003), 344, 230-238
 CODEN: ICHAA3; ISSN: 0020-1693
 PB Elsevier Science B.V.
 DT Journal
 LA English
 CC 78-7 (Inorganic Chemicals and Reactions)
 Section cross-reference(s): 34
 OS CASREACT 138:394839
 AB Glutathione (γ -Glu-Cys-Gly, GSH, 1) forms a binary Zn complex L2Zn3
 (1.1) which is polymeric. Its triply blocked and purely S-functional form
 [4-NO₂-Bz]- γ -Glu(Cys-Gly-OEt)-OEt (2) yields a polymeric complex
 L2Zn (2.1) and a monomeric pyrazolylborate Zn complex TpZn-SR (2.2).
 Doubly O-protected GSH was converted with histidine and cysteine to the
 difunctional tetrapeptides NAc-His- γ -Glu(Cys-Gly-OEt)-OEt (3) and
 NAc-Cys- γ -Glu(Cys-Gly-OEt)-OEt (4). Peptide 3 could be converted to
 the oligomeric Zn halide complex L·ZnCl (3.1). The Zn complexation
 of peptide 4 was studied by potentiometric titrns., revealing that the
 dominating species in solution are [ZnL(LH)]- and [ZnL2]2-, both with a ZnS4
 coordination. In contrast, the isolated complex is the polymeric species
 LZn (4.1). With pyrazolylborate Zn units a monomeric dizinc complex
 TpZn-S.apprx..apprx.S-ZnTp (4.2) was obtained. N-protected GSH was
 extended by two histidine or cysteine units to the pentapeptides
 H- γ -Glu(Cys-Gly-His-OMe)-His-OMe (5) and H- γ -Glu(Cys-Gly-Cys-
 OMe)-Cys-OMe (6). Compds. 5 and 6 formed ill-defined polymeric Zn
 complexes. For 5, [L·Zn]ClO₄, and for 6, [L3Zn5]CF₃COO could be
 obtained anal. pure.
 ST glutathione deriv peptide prepn complexation zinc; zinc complex
 glutathione deriv peptide prepn
 IT Peptides, preparation
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (zinc complexes; preparation of zinc(II) complexes of glutathione and of
 glutathione-derived peptide derivs.)
 IT 183113-39-5
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (complexation with glutathione-derived peptides)
 IT 70-18-8, Glutathione, reactions 1499-46-3 27486-84-6 27486-87-9
 183498-47-7 302325-91-3 528530-58-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (for preparation of glutathione-derived peptides and their zinc(II)
 complexes)
 IT 528530-74-7P 528530-77-0P 528530-80-5P 528530-82-7P 528530-84-9P
 528530-86-1P 528530-88-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (for preparation of glutathione-derived peptides and their zinc(II)
 complexes)
 IT 528530-61-2P 528530-64-5P 528530-66-7P 528530-69-0P
 528530-72-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and complexation with zinc(II))

- IT 7440-66-6DP, Zinc, complexes of glutathione-derived peptides
 35436-84-1DP, zinc complex 528530-63-4DP, zinc complex 528530-68-9DP,
 zinc chloro complex 528530-71-4DP, zinc complex 528530-90-7P
 528530-92-9P 528530-96-3P 528530-98-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
- IT 122-04-3, 4-Nitrobenzoyl chloride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (protecting group for preparation of glutathione-derived peptides and their
 zinc(II) complexes)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (24) Rombach, M; Inorg Chim Acta 2002, V334, P25 HCAPLUS
- (25) Vahrenkamp, H; Acc Chem Res 1999, V32, P589 HCAPLUS
- (26) Vallee, B; Acc Chem Res 1993, V26, P543 HCAPLUS
- (27) Vogler, R; Inorg Chim Acta 2002, V329, P1

IT 528530-88-3P

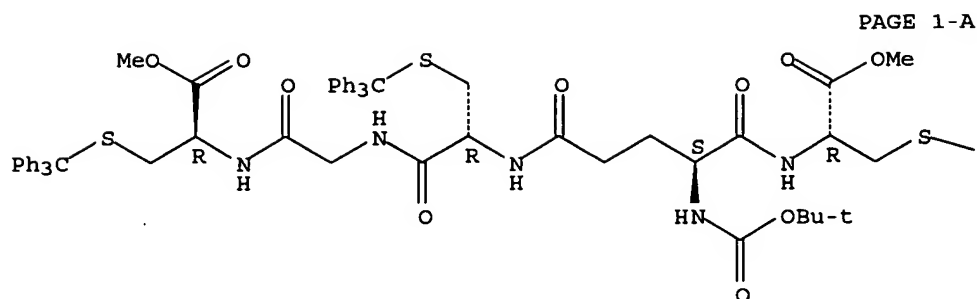
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

(for preparation of glutathione-derived peptides and their zinc(II)
 complexes)

RN 528530-88-3 HCAPLUS

CN L-Cysteine, S-(triphenylmethyl)-L-cysteinylglycyl-S-(triphenylmethyl)-,
 methyl ester, (1'→1)-amide with N-[(1,1-dimethylethoxy)carbonyl]-L-
 α -glutamyl-S-(triphenylmethyl)-L-cysteine 2'-methyl ester (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.



PAGE 1-B

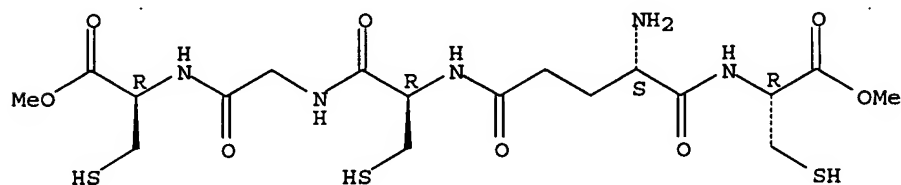
—CPh₃

IT 528530-72-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and complexation with zinc(II))
 RN 528530-72-5 HCAPLUS
 CN L-Cysteine, L-cysteinylglycyl-, methyl ester, (1'→1)-amide with
 L-α-glutamyl-L-cysteine 2'-methyl ester, mono(trifluoroacetate)
 (salt) (9CI) (CA INDEX NAME)

CM 1

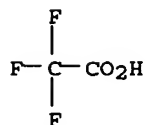
CRN 528530-71-4
 CMF C18 H31 N5 O8 S3

Absolute stereochemistry.



CM 2

CRN 76-05-1
 CMF C2 H F3 O2



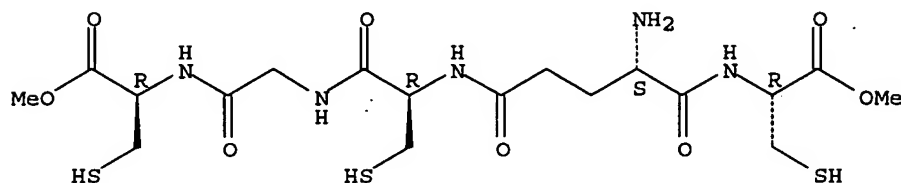
IT 528530-71-4DP, zinc complex
 RL: SPN (Synthetic preparation); PREP (Preparation)

Search done by Noble Jarrell

(preparation of)

RN 528530-71-4 HCAPLUS
 CN L-Cysteine, L-cysteinylglycyl-, methyl ester, (1'→1)-amide with
 L-α-glutamyl-L-cysteine 2'-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:866867 HCAPLUS
 DN 137:370487
 ED Entered STN: 15 Nov 2002
 TI Manufacture of polydisulfides by ring-opening polymerization of cyclic
 disulfides
 IN Kudo, Hiroto; Endo, Takeshi
 PA JSR Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C08G075-14
 CC 35-5 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 28

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002327061	A2	20021115	JP 2001-132057	20010427
PRAI	JP 2001-132057		20010427		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002327061	ICM	C08G075-14

AB Polydisulfides are manufactured by ring-opening polymerization of cyclic disulfides obtained from dithiols having cysteine groups at the both terminals. Thus, L-Cys Me ester HCl salt was amidated with pimeloyl dichloride, dimerized, and polymerized at 100° for 24 h in DMF to give 90% a polydisulfide with average mol. weight 25,000.

ST cyclic cysteine ring opening polymn; dithiol cyclic ring opening polymn; polydisulfide manuf ring opening polymn

IT Polysulfides
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (polyamide-; manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

IT Polyamides, preparation
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (polysulfide-; manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

IT Polymerization
 (ring-opening; manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

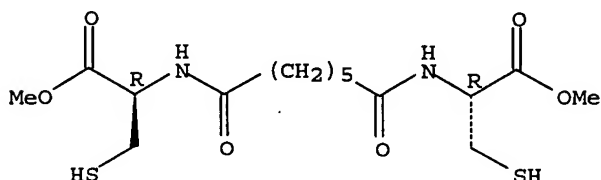
IT 474511-29-OP 474511-30-3P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

IT 256953-91-OP 400652-92-8P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)

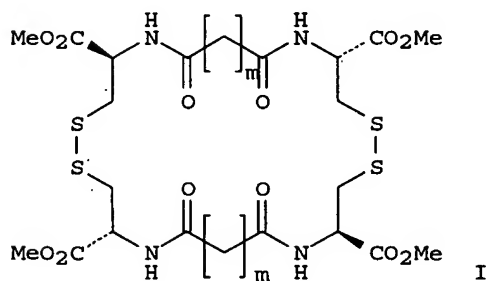
Search done by Noble Jarrell

IT 142-79-0, Pimeloyl dichloride 18598-63-5, L-Cysteine Methyl ester hydrochloride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)
 IT 400652-92-8P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (manufacture of polydisulfides by ring-opening polymerization of cyclic disulfides)
 RN 400652-92-8 HCAPLUS
 CN L-Cysteine, N,N'-(1,7-dioxo-1,7-heptanediyl)bis-, dimethyl ester (9CI)
 (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L18 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:749822 HCAPLUS
 DN 136:200456
 ED Entered STN: 15 Oct 2001
 TI Efficient synthesis of macrocycles by oxidation of cysteine-based dithiols
 AU Kudo, H.; Sanda, F.; Endo, T.
 CS Chemical Resources Laboratory, Tokyo Institute of Technology, Midori-ku, Yokohama, 226-8503, Japan
 SO Tetrahedron Letters (2001), 42(44), 7847-7850
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 CC 34-3 (Amino Acids, Peptides, and Proteins)
 Section cross-reference(s): 28
 OS CASREACT 136:200456
 GI



AB The cysteine-bridged macrocycles I ($m = 1-6$), 22-32-membered cyclic dimers could be synthesized with a high reagent concentration (1 M) in excellent yields by the oxidation of the cysteine-based compds. having dithiol groups.
 ST cysteine methyl ester amidation alkanedicarboxyl chloride; dithiol cysteine based prepn dimerization polymn; macrocyclic amide polymethylene bridged prepn; polymer cysteine bridged prepn
 IT Acid halides
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (chlorides, diacid; preparation of cysteine-bridged macrocycles via oxidation)

of dithiols)

IT Macrocyclic compounds
RL: SPN (Synthetic preparation); PREP (Preparation)
(cysteine-bridged, amides; preparation by oxidation of cysteine-based dithiols)

IT Thiols (organic), preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(dithiols, cysteine-based; preparation of cysteine-bridged macrocycles by
oxidation of cysteine-based dithiols)

IT Oxidation
(of cysteine-based dithiols to cysteine-bridged macrocycles)

IT 111-50-2, Hexanedioyl dichloride 142-79-0, Heptanedioyl dichloride
543-20-4, Succinoyl chloride 1663-67-8, Malonyl chloride 2485-62-3,
L-Cysteine methyl ester 2873-74-7, Pentanedioyl dichloride 10027-07-3,
Octanedioyl dichloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of cysteine-based dithiols for oxidation to cysteine-bridged
macrocycles)

IT 400652-95-1P 400652-96-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of cysteine-based polymers)

IT 400652-88-2
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

IT 400652-89-3P 400652-90-6P 400652-91-7P
400652-92-8P 400652-93-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

IT 256953-80-7P 256953-88-5P 256953-91-0P 256953-95-4P 400652-94-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

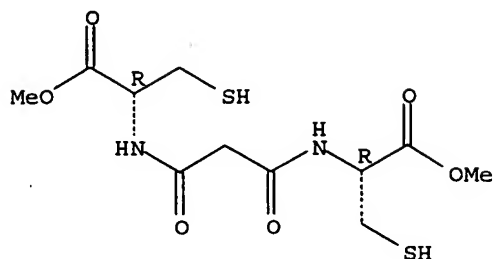
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- (18) Kishore, R; J Am Chem Soc 1985, V107, P8019 HCAPLUS
- (19) Marrone, T; J Am Chem Soc 1992, V114, P7542 HCAPLUS
- (20) Ranganathan, D; J Am Chem Soc 1998, V120, P2695 HCAPLUS
- (21) Ranganathan, D; J Org Chem 1999, V64, P9230 HCAPLUS
- (22) Rizo, J; Annu Rev Biochem 1992, V61, P387 HCAPLUS
- (23) Sprengard, U; Angew Chem, Int Ed Engl 1996, V35, P321 HCAPLUS
- (24) Zhang, I; J Am Chem Soc 1997, V119, P2363

IT 400652-88-2
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

RN 400652-88-2 HCAPLUS

CN L-Cysteine, N,N'-(1,3-dioxo-1,3-propanediyl)bis-, dimethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 400652-89-3P 400652-90-6P 400652-91-7P

400652-92-8P 400652-93-9P

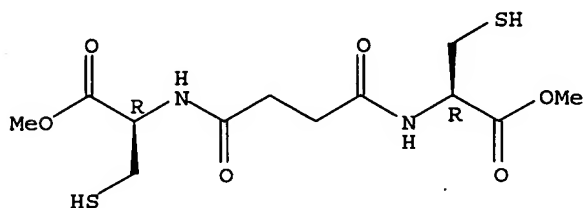
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of cysteine-bridged macrocycles by oxidation of dithiols)

RN 400652-89-3 HCAPLUS

CN L-Cysteine, N,N'-(1,4-dioxo-1,4-butanediyl)bis-, dimethyl ester (9CI) (CA INDEX NAME)

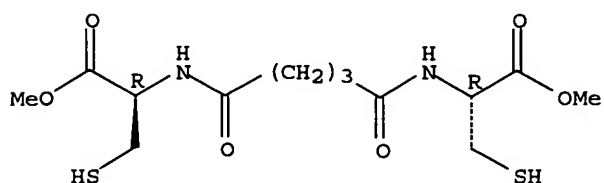
Absolute stereochemistry. Rotation (+).



RN 400652-90-6 HCAPLUS

CN L-Cysteine, N,N'-(1,5-dioxo-1,5-pentanediy)bis-, dimethyl ester (9CI) (CA INDEX NAME)

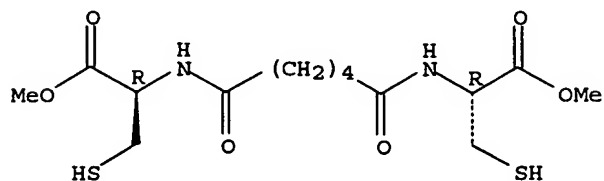
Absolute stereochemistry. Rotation (+).



RN 400652-91-7 HCAPLUS

CN L-Cysteine, N,N'-(1,6-dioxo-1,6-hexanediyl)bis-, dimethyl ester (9CI) (CA INDEX NAME)

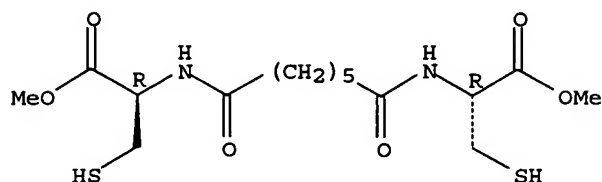
Absolute stereochemistry. Rotation (+).



RN 400652-92-8 HCAPLUS

CN L-Cysteine, N,N'-(1,7-dioxo-1,7-heptanediyl)bis-, dimethyl ester (9CI)
(CA INDEX NAME)

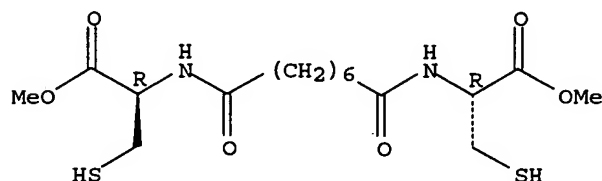
Absolute stereochemistry. Rotation (+).



RN 400652-93-9 HCAPLUS

CN L-Cysteine, N,N'-(1,8-dioxo-1,8-octanediyl)bis-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L18 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1976:165204 HCAPLUS

DN 84:165204

ED Entered STN: 12 May 1984

TI Insulin, insulin analogs, and derivatives

IN Geiger, Rolf; Obermeier, Rainer

PA Hoechst A.-G., Fed. Rep. Ger.

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT Patent

LA German

IC C07C; A61K

CC 34-4 (Synthesis of Amino Acids, Peptides, and Proteins)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2428412	A1	19760115	DE 1974-2428412	19740612
	NL 7506754	A	19751216	NL 1975-6754	19750606
	CH 613185	A	19790914	CH 1975-7416	19750609
	US 4014861	A	19770329	US 1975-585604	19750610
	CA 1044227	A1	19781212	CA 1975-229026	19750610
	DK 7502631	A	19751213	DK 1975-2631	19750611
	SE 7506695	A	19751215	SE 1975-6695	19750611
	AU 7582038	A1	19761216	AU 1975-82038	19750611
	BE 830186	A1	19751212	BE 1975-157293	19750612
	FR 2274605	A1	19760109	FR 1975-18372	19750612
	JP 51023290	A2	19760224	JP 1975-73026	19750612
	JP 58011427	B4	19830302		
	US 32015	B7	19851029	US 1979-22852	19790322
PRAI	DE 1974-2428412	A	19740612		
	US 1975-585604	A5	19750610		

CLASS

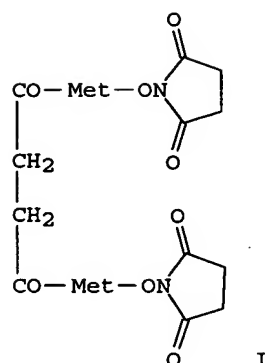
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 2428412	IC	C07CIC A61K
US 4014861	NCL	530/303.000; 530/409.000; 930/010.000; 930/DIG.621

US 32015

NCL

530/303.000; 530/339.000; 930/010.000; 930/260.000;
930/DIG.621

GI



AB Blocking the 1st residue of insulin A chain tetrasulfonate with the methionine derivative I followed by reaction with NB1-(trifluoroacetyl)insulin B chain disulfonate in 4-ethylmorpholine at pH 8-11 gave a methionine bridged insulin derivative which then underwent disulfide bridge formation in thioglycol under N followed by cleavage of the blocking groups and the methionine bridging group to give 38% insulin with biol. activity.

ST insulin methionine bridge

IT 59113-60-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking of)

IT 59006-17-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deesterification of)

IT 59006-18-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and reaction with hydroxysuccinimide)

IT 59006-19-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with insulin A chain tetrasulfonate)

IT 59217-92-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with insulin A chain tetrasulfonate methioine derivs.)

IT 18152-38-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with methionine derivs.)

IT 11137-90-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with trifluoroacetic acid methyl ester)

IT 59006-20-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT 431-47-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with insulin derivs.)

IT 6066-82-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methionine derivs.)

IT 108-30-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methionine methyl ester)

IT 2491-18-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with succinic anhydride)

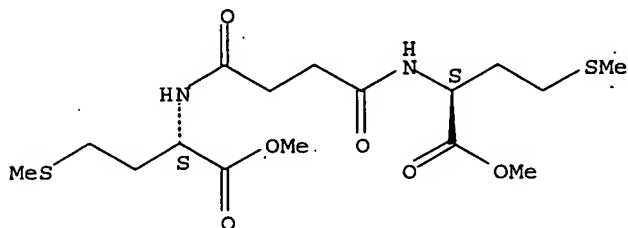
IT 11070-73-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(using methionine bridging groups)

IT 59006-17-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and deesterification of)

RN 59006-17-6 HCAPLUS

CN L-Methionine, N,N'-(1,4-dioxo-1,4-butanediyl)bis-, dimethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

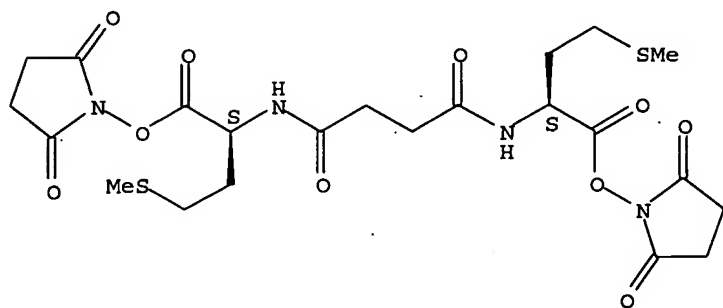


IT 59006-19-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and reaction with insulin A chain tetrasulfonate)

RN 59006-19-8 HCAPLUS

CN Butanediamide, N,N'-bis[1-[[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]-3-(methylthio)propyl]-, [S-(R*,R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

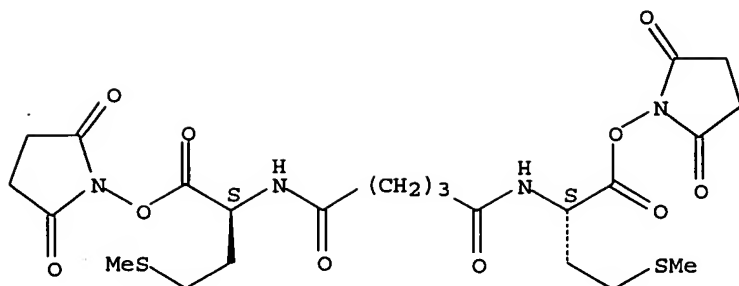


IT 59006-20-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 59006-20-1 HCAPLUS

CN Pentanediamide, N,N'-bis[1-[[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]-3-(methylthio)propyl]-, [S-(R*,R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1973:537505 HCAPLUS

DN 79:137505

ED Entered STN: 12 May 1984

TI Sulfur-containing amino acid derivatives useful in therapeutics and in cosmetics

IN Dussourd, Lucien; Cousse, Henri; Bonnaud, Bernard

PA Fabre, Pierre, S. A.

SO Fr. Demande, 8 pp. Div. of Fr. 2,159,183.

CODEN: FRXXBL

DT Patent

LA French

IC A61K; C07C; C07D

CC 34-2 (Synthesis of Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1, 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2159183	A1	19730622	FR 1971-40215	19711109
	FR 2159183	B1	19750606		
PRAI	FR 1971-40215	A	19711109		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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FR 2159183	IC	A61KIC C07CIC C07D
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AB MeSCH₂CH₂CH(COR)NHCO(CH₂)₈CONHCH(COR)CH₂CH₂SMe (I, R = OH, ONa, OMe, NH₂) and related compds. were prepared for treating acne and seborrhea. Thus I (R = OH) was obtained by treating methionine with sebacyl chloride.

ST methionine sebacyl acne seborrhea

IT Acne
(bis(thiomethyl)piperazinedione for treatment of)

IT Seborrhea
(pyridoxine N-sebacoylmethioninate for treatment of)

IT Shampoos
(sodium N-sebacoylmethioninate containing)

IT 49761-96-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(acne treatment composition containing)

IT 49761-97-9 50794-98-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(antiseborrheal composition containing)

IT 49761-90-2P 49761-91-3P 49761-92-4P 49761-94-6P
49761-95-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

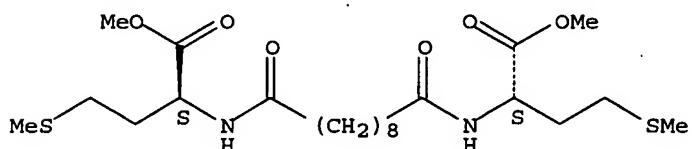
IT 111-19-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methionine methyl ester)

IT 10332-17-9 19298-72-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with sebacyl chloride)

Search done by Noble Jarrell

IT 111-20-6, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (with methioninamide)
 IT 63-68-3, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (with sebacoyl chloride)
 IT 49761-92-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 49761-92-4 HCAPLUS
 CN L-Methionine, N,N'-(1,10-dioxo-1,10-decanediyl)bis-, dimethyl ester (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



L18 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1962:60315 HCAPLUS

DN 56:60315

OREF 56:11449f-h

ED Entered STN: 22 Apr 2001

TI Mucic acid derivatives

IN Morel, Charles J.

PA J. R. Geigy A.-G.

DT Patent

LA Unavailable

INCL 12P

CC 27 (Aliphatic Compounds)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CH 354788	----	19610731	CH	19570415

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
CH 354788	INCL 12P	-----

AB Compds. with strong antiphlogistic activity were prepared by treating mucic acid-N,N1-bis(aminocarboxylic acid) dialkyl ester with AcCl or AcBr in the presence of a tertiary organic base. Thus, a mixture of equal vols. mucic acid di-Et ester (m. 172°) and H2NCH2CO2Et were left 2 days at room temperature, and the reaction product was washed with ether to give mucyl-N, N1-bis(glycine) diethyl ester (I), m. 205-6° (H2O). A suspension of I 3.8 in pyridine 4 and CHCl3 50 treated at 0-10° with AcCl 3.3 and CHCl3 4 parts, heated 1.5 hrs. to reflux, washed with N HCl, NaHCO3 solution and H2O, dried and concentrated gave tetra-O-acetylmucyl-N,N1-bis(glycine) diethyl ester, m. 216-18° (MeOH). Similar RCO(CHOAc)4COR prepared were (R and m.p. given): 1-EtCO2CH2CH2CH(CO2Et)NH, 147-8° (MeOH); 1-EtCO2CH2CH(CO2Et)NH, 140-1° (EtOAc); 1-MeSCH2CH2CH(CO2Et)NH, 191-2° (EtOAc); EtCO2CH2NMe, 78-9° (alc); 1-EtCO2CHMeNH, 192-5° (alc.).

IT Aspartic acid, N,N'-galactaroyldi-, tetraethyl ester, tetraacetate, (-)-
 Glutamic acid, N,N'-galactaroyldi-, tetraethyl ester, tetraacetate, L-
 Glycine, N,N'-galactaroyldi-, diethyl ester
 Glycine, N,N'-galactaroyldi-, diethyl ester, tetraacetate
 Methionine, N,N'-galactaroyldi-, diethyl ester, tetraacetate, 1-

IT 526-99-8, Galactaric acid
 (derivs.)

IT 22634-92-0, Heptanedioic acid, 4-oxo-, dimethyl ester 101502-37-8,
 Alanine, N,N'-galactaroyldi-, diethyl ester, tetraacetate, L-

Search done by Noble Jarrell

101502-38-9, Sarcosine, N,N'-galactaroyldi-, diethyl ester, tetraacetate
(preparation of)

L18 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1959:67464 HCAPLUS

DN 53:67464

OREF 53:121851,12186a-c

ED Entered STN: 22 Apr 2001

TI Tetraacetylmucyl-N,N1-bis(aminomonocarboxylic acid) dialkyl esters and
tetraacetylmucyl-N,N1-bis(aminodicarboxylic acid) tetraalkyl esters

PA J. R. Geigy Akt.-Ges.

DT Patent

LA Unavailable

CC 10B (Organic Chemistry: Aliphatic Compounds)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 807601		19590121	GB	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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AB The title compds., having antiphlogistic action and useful for the treatment of inflammatory disorders, were prepared H₂NCH₂CO₂Et (I).HCl 14 added to tetraacetylmucic acid dichloride 21 in CHCl₃ 500, Et₃N 22 in CHCl₃ 75 parts added dropwise with stirring at 0-5°, the mixture stirred 3 hrs. at room temperature, the CHCl₃ solution washed with dilute HCl solution, NaHCO₃ solution, and H₂O, dried, the CHCl₃ distilled, and the residue recrystd. from MeOH gave ROC[CH(OAc)]₄COR (II) (R = NHCH₂CO₂Et) (III), m. 216-18°. An alternative procedure for preparing III was described wherein di-Et mucate and I were condensed and the product (m. 205-6°) acetylated. Similarly were prepared the following II (R and m.p. given): L-EtO₂CCH₂CH₂CH(CO₂Et)NH, 147-8° (MeOH); L-EtO₂CCH₂CH(CO₂Et)NH, 140-1° (EtOAc); L-MeSCH₂CH₂CH(CO₂Et)NH, 191-2° (EtOAc); EtO₂CCH₂NMe, 78-9° (EtOH); L-EtO₂CCH(Me)NH, 192-5° (EtOH).

IT Inflammation
(-inhibiting substances, N,N-carboxyalkylmucamides as)

IT Alanine, N,N'-mucoyldi-, L-, di-Et ester, tetraacetate
Aspartic acid, N,N'-mucoyldi-, L-, tetra-Et ester, tetraacetate
Glutamic acid, N,N'-mucoyldi-, L-, tetra-Et ester, tetraacetate
Glycine, N,N'-mucoyldi-, diethyl ester, tetraactate
Methionine, N,N'-mucoyldi-, L-, di-Et ester, tetraacetate

IT 101502-38-9, Sarcosine, N,N'-mucoyldi-, diethyl ester, tetraacetate
(preparation of)

IT 5627-20-3, Mucamide
(N,N'-carboxyalkyl derivs.)

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Search done by Noble Jarrell

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L16 ANSWER 1 OF 2 HCAOLD COPYRIGHT 2005 ACS on STN

AN CA56:11449g CAOLD

TI mucic acid derivs.

AU Morel, Charles

PA Geigy, J. R., A.-G.

DT Patent

PATENT NO.	KIND	DATE
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PI CH 354788

IT 29214-62-8 98075-57-1 101502-37-8 101502-38-9 101502-46-9 106217-01-0
106684-43-9 107541-49-1

L16 ANSWER 2 OF 2 HCAOLD COPYRIGHT 2005 ACS on STN

AN CA53:12186a CAOLD

TI tetraacetylmucyl-N,N'-bis(aminomonocarboxylic acid) dialkyl esters and
tetraacetylmucyl-N,N'-bis(aminodicarboxylic acid) tetraalkyl esters

PA Geigy, J. R., A.-G.

DT Patent

PATENT NO.	KIND	DATE
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PI GB 807601

IT 101502-37-8 101502-38-9 101502-46-9 106217-01-0 106684-43-9
107541-49-1

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